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AUTHOR Tomlinson, Louise M.
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ABSTRACT

Locus of control is considered a primary factor in the difference between students' high and low achievement. This phenomenon is defined as a polar construct which refers to the degree to which individuals view their successes and failures as either contingent upon their own behaviors (internal locus of control) or independent of them (external locus of control). Internal locus of control has been associated with success in school. External locus of control has been associated with "learned helplessness" and with thinking that is concrete, convergent, and compartmentalized. Researchers have reported findings indicating distinguishable differences between the cognitive activities of internally and externally oriented individuals, wherein internal orientation is linked to self-determination and persistence. Research also indicates that an individual's locus of control can be altered. Experiences which allow effectiveness, as well as behavioral counseling, goal setting, immediate reinforcement, contingency contracts, and appropriate curriculum planning have been found successful in helping externally oriented students improve academically and attain a more internal orientation. A three-page reference list concludes the document. (Author/NB)

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AND

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Louise M. Tomlinson
University of Georgia

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Abstract

Locus of Control is considered a primary factor in the difference between students' high and low achievement. This phenomenon is defined as a polar construct which refers to the degree to which an individual views their successes and failures as either contingent upon their own behaviors or independent of them. Internal Locus Of Control has been associated with success in school. External Locus of Control has been associated with "learned helplessness" and with thinking that is concrete, convergent, and compartmentalized. Researchers report findings indicating distinguishable differences between the cognitive activities of internally and externally oriented individuals, wherein internal orientation is linked to self-determination and persistence. Research also indicates that an individual's Locus of Control can be altered. Experiences which allow effectiveness, as well as behavioral counseling, goal setting, immediate reinforcement, contingency contracts and appropriate curriculum planning have been found successful in helping externally oriented students improve academically and attain a more internal orientation.

LOCUS OF CONTROL AND ITS AFFECT ON ACHIEVEMENT

It has been stated by Nielsen and Long (1981), that the primary difference between low and high achievers is student's attitudes, and an important component of students attitudes is their locus of control orientation. It is also noted that learning disabled children are found, more often, to have an outer locus of control instead of an inner locus of control. Locus of control is a polar construct, frequently mentioned in special education, which refers to the degree to which an individual views their successes and failures as either contingent upon their own behaviors or independent of them. Individuals who believe success and failure are due to external factors like luck, fate, and chance are said to have an external locus of control. Individuals who believe that they control their successes and failures by internal factors such as ability and effort are said to have an internal locus of control.

Internal locus of control has been associated with success in school. Chapman & Boersma (1979); Hallahan, Gajar, Cohen, and Tarver (1978); and Perl, Donahue and Bryan (1980), have all found in their research that learning disabled students (LDs) attain external locus of control scores significantly more often than their non-learning disabled peers. This external orientation has been found regardless of age or scales used. The researchers (above) also indicate that LDs are more likely to be externally oriented for success rather than failure. They perceive responsibility for their failures but credit external influences for their success. External locus of control is a trait possessed by many individuals other than the learning disabled. Externality has been related to lower socio-economic status, minority group membership, and physical handicaps (Franklin (1963), Graves (1963), Joe (1961), Powell & Vega (1972), and Pentecost (1975)).

"Learned helplessness" results when people believe that outcome has no relationship to their efforts -- resulting in a lack of persistence in assigned tasks or even a failure to perceive the ability of a character in a story to exert control over the possible outcomes. Learned helplessness limits learner strategies such as chunking and verbal rehearsal to improve memory. LDs use these strategies less often or not at all, and they do not recognize verbal encoding as an important agent in their own cognition. According to Lefcourt, externally controlled individuals whose reinforcement is dependent upon luck, fate, or significant others, tend to exercise cognitive processes that are concrete, convergent, and compartmentalized, while internally controlled individuals, who consider consequences to be a function of their own behavior, exercise cognitive processes that are more abstract, divergent, and generalized in nature.

Lefcourt indicates that (1976), for many organisms, the loss of perceived control is not taken as a simple isolated incident, but rather as a pervasive and profound reaction holding implications for the creature's judgement of his potential for survival. Seligman et al. (1968) conclude that inappropriate passive acceptance of aversive stimuli among canine subjects could be construed in terms of perceived lack of control over reinforcements. Lefcourt indicates that internals avail themselves of information, even if it bears negative connotations for themselves, more than do externals. It has been assumed that this difference derives from the fact that internals believe that they can act on their own behalf and therefore require more information, while externals more readily accept dependency on more competent others and thus have less need of information. Seeman's (1963) research results have led him

to conclude that an individual's sense of powerlessness governs his attention and acquisition processes.

In an experiment where the subjects were to interview two assistants -- one who was pleasant and engaged in eye contact, and the other who was aloof and avoided eye contact -- Lefcourt and Wine (1969) concluded that internal subjects were more likely to attend to cues which help to resolve uncertainties. The more conventional assistant offered less challenge to subjects because he was more predictable. Studies by Rotter and Mulry (1965) indicate that internals devote more attention to decisions about skill-related matters. Julian and Kate (1968) reported that internals required more time to make decisions as the difficulty of decision-making tasks increased. Lefcourt et al. (1973) also conducted a study in which external-field dependent subjects, the hypothetically most external individuals, were the very last to become aware of the response choice afforded by double entendres on a word list designed to elicit word associations. Wolk and Ducette (1974) found that internals did consistently better than externals on both intentional and incidental learning tasks. Internals found more typographical errors, remembered more story content, recalled more dates when instructed to do so , and recalled more names when not directed to do so. Results allowed the investigators to conclude that internals are more "perceptually sensitive."

In terms of differences in cognitive activity between internals and externals, internals have been found to be more perceptive and ready to learn about their surroundings. They are more inquisitive, curious, and better processers of information than are externals. Evidence has been presented which supports the assumed relationship between locus of control and cognitive activity. Whether the focus has been on attention, deliberation, inquisitiveness, or utilization of information, internals have more often been

found to be active and alert individuals than have externals. According to Lefcourt, an "internal locus of control seems to be a sine qua non of being able to steer one's self more clearly and appropriately through the vagaries and confusions of different situations." Research has also indicated that achievement effort and the willingness or ability to tolerate delays in the attainment of reinforcements are related to the perception of causation. Individuals who develop with little expectation that life's satisfactions and misfortunes can be determined by personal effort have been less apt to exert themselves or to persist over lengthy time intervals in the pursuit of distant goals; such exertion and persistence are the sine qua non of achievement activity. Research findings indicate that the engagement in achievement activity of long-range skill demanding tasks is unlikely if one views himself as being at the mercy of capricious external forces.

The Alteration of Locus of Control

Lefcourt (1976) contends that, no matter what experiences one has, if they are not perceived as the results of one's own actions, they are not effective for altering the ways in which one sees things and, consequently, the way in which one functions. In Rotter's (1966) analysis, the child is described as not assimilating new learnings if action-outcome sequences are perceived as being non-contingent; that is, he will not learn from his experiences unless he believes that they are lawfully related to his own actions. The research pertaining to familial origins of locus of control seems to indicate that an attentive, responsive, critical and contingent milieu is a precursor of the development of an internal locus of control. It is stated that, the less responsive and less opportune milieu surrounding the poor, the ostracized, and the deprived creates a climate of fatalism and

helplessness which is reflected in the scores that individuals obtain on locus of control measures. Lower socio-economic status, membership in denigrated minority groups, and non-voluntary quasi-incarceration share commonality in affording minimal contingency between quality of effort and quality of reward, and in generating more external control expectancies. Accordingly, access to opportunity for contingent responses, whether in the home or in the larger social milieu, seems to be essential in the development of locus of control. The contingent responsiveness intrinsic to a nurturant but non-suffocating home and to a responsive and fair milieu seems to be the necessary ingredient for the growth of internal control expectancies that research has uncovered thus far.

Reimanis (1971) has presented data from three separate investigations in which deliberate attempts were made to alter locus of control among students in various age groups. In one experiment, Reimanis held weekly meetings for three months with the teachers of the experimental group children within which he discussed the means of modifying classroom procedures to encourage children to develop feelings of internality. These teachers knew the identity of the experimental group (externals) and, as time permitted, gave these children more individual attention with respect to learning about their behavior contingencies and about consistency in the environment around them. The later training sessions were devoted to clarifying reinforcement principles by which teachers could identify what was actually reinforcing for each child. Subsequently, they used this information to point out behavior-effect contingencies to their pupils. The experimental group showed a significantly greater change toward internality than did control group children. Furthermore, experimental group children demonstrated more classroom behavior associated with an internal locus of control than did control group children.

DeCharms (1972) established training programs specifically aimed at encouraging "origin" (internal) behaviors in the schools. His thesis was that, to enable a person to behave like an "origin," the person must be helped to a) determine realistic goals for himself, b) know his own strengths and weaknesses, c) determine concrete action that he can take to help him reach his goals, d) consider how he can tell whether he is approaching his goal -- whether his action is having the desired effect. It was found that children who had teachers trained in this endeavor perceived their classroom as more encouraging of origin behavior than did children with untrained teachers. The effects of teachers training on student behavior were evaluated and indicated that, on a longitudinal basis in successive grades, children's stories (which were scored for origin power (internal-external) categories) origin scores increased following each year of training. Evidence was obtained that personal causation affected the ways in which children produced imaginative stories. After training, the characters in the stories were described more often as setting their own goals, determining their own instrumental activity, as being more realistic, and as being more self-confident. DeCharms found that students who underwent the special causation training, offered by the teachers, did not lose ground in achievement scores as they proceeded from fifth to seventh grade, whereas control group children showed the more typical increasing disparity from national norms. In addition, experimental children averaged fewer absences than control group children.

Both DeCharms and Reimanis have shown that behavioral as well as indirect verbal indicators of locus of control can be altered by training programs directed at increasing an individual's sense of personal causation. Each of these investigators conducted research in educational settings where the concern was largely with achievement-related activity. They have both

demonstrated the efficacy of educational approaches to changing students perceptions of causality.

Lefcourt indicates that:

> These studies by Reimanis and DeCharms are among the few that have not relied entirely upon changes in scale scores to ascertain the effectiveness of therapeutic techniques. The larger number of investigators have used locus of control scores before and after treatment to contrast the shifts in perceptions against control groups that have received either less adequate or no treatments. Though these studies offer some further information regarding methods for changing perception of causality, they are subject to more criticisms than behaviorally focused investigations noted above, due to the more likely bias of responses of their clients (1976, p. 123).

Nowicki and Barnes (1973) designed a quasi-therapy program in which contingency reinforcement and effectance training were intrinsic elements. The setting was a summer camp provided for deprived inner-city adolescents. The camp was described as being highly structured with emphasis placed upon contingent reinforcement for good and poor performance. With variety, the camp activities stressed cooperation in the pursuit of group goals -- to accomplish these group achievements, a number of conservation projects were undertaken. During projects, campers were socially reinforced for each of their efforts, and at the end of each week, actual deeds by individuals were recognized at a public ceremony (Indian Council). The Nowicki-Strickland (xxxx) locus of control scale was administered at the beginning and end of each week. An overall comparison of each of eight groups was significant in that some shift toward internality was expressed after a week's camping experience. Similar to DeCharm's (1972) finding that internality increased cumulatively, with additional training toward that end, Nowicki and Barnes (1973) found that the youngsters who returned for an extra week's session revealed further shifts toward internality -- they began their extra week with

"pre-treatment" locus of control scores that were more internal than any of the real pre-treatment (new) groups, and still they revealed further shifts toward internality. In essence, the more experience with challenge and contingent reinforcement the more internal youngsters were likely to feel.

Research with both naturally occurring and contrived events has revealed that locus of control scores assessed by scalar and/or behavioral means are susceptible to influence. People change in their customary causal attributions if they encounter experiences that meaningfully alter their contingencies between their acts and perceived outcomes. From the research reviewed here it can be concluded that the more action oriented therapies which stress the learning of and effecting of contingent results seem to be the more favorable optional approaches for challenging client's perceptions of causality.

Curriculum Planning to Influence Locus of Control

Evidence has been found which indicates that experiences in positions that allow effectiveness are associated with greater internality. According to Harvey (1971), to help others is, in a very real sense, being effective. Whether in an advisory or counseling capacity, a helper actively seeks to effect another and sometimes can see the explicit results of his efforts. Consequently, it can be hypothesized that the learning of skills which enable a person to become an effective helper should result in a greater sense of internal control.

Gottesfeld and Dozier (1966) found that the more experience that "community stimulators" had within their "Massive Economic Neighborhood Development" program in East Harlem, the more internal were their scores on Rotter's locus of control scale. Likewise, Martin and Shepel (1974) found

that nurses who requested and subsequently received some training in personnel counseling skills exhibited a significant shift toward internality on James' locus of control scale. Their training consisted of three elements: Methods for developing helping relationships, for identifying and exploring problems, and for creating plans of action. Role playing was used as an instructional device and the nurses learned how to seek information and to encourage potential help seekers in problem solving.

Behavioral counseling, goal setting, immediate reinforcement, and contingency contracts have succeeded in helping externally oriented students improve academically and attain a more internal orientation Andrews and Debus (1970), Bradley and Gaa (1977), Dweck (1975), , Eitzer (1974), Gagne (1974), Gregory (1976), Joe (1971), Krovertz (1974), Lefcourt (1976), Nielson (1979), Phares (1966), and Quinn (1975)) as well as reading stories in which main characters exert control over their own lives (Pedhazur and Wheeler (1971)). Curriculum planning would be best suited to assure a positive influence on the locus of control of students if it encourages a more democratic school organization and system of classroom procedures -- one in which students are allowed more input in decision-making processes for classroom activities and course objectives. Curriculum should be developed according to community needs and dynamics -- with relevance to the students' real-life circumstances. Emphasis should be placed on problem solving strategies in all subject areas. Approaches to teaching the content areas should involve frequent hands-on experiences which are designed to simulate cause and effect relationships. Peer tutoring of a complementary nature should be incorporated at all grade levels, so that "underachievers" can assist classmates, in area for which the underachiever has a strength, in exchange for the classmate's help in the underachievers' weakness. More value

should be placed upon cooperative education -- work/school experience for full academic credit. Last, but not least, inservice training in the affective domain, regarding locus of control, should be included in staff development programs.

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